

## DESCRIPTION

<b>Species Reactivity</b>	Rat
<b>Specificity</b>	Detects rat CXCL1/GRO $\alpha$ /KC/CINC-1 in Western blots. In Western blots, approximately 50% cross-reactivity with recombinant mouse (m) KC is observed and less than 10% cross-reactivity with recombinant human (rh) GRO $\alpha$ , rhGRO $\beta$ , rhGRO $\gamma$ , and rmMIP-2 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant rat CXCL1/GRO $\alpha$ /KC/CINC-1 Ala25-Lys96 Accession # P14095
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
<b>Western Blot</b>	0.1 $\mu$ g/mL	Recombinant Rat CXCL1/GRO $\alpha$ /KC/CINC-1 (Catalog # 515-CN)

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Cytokine-induced neutrophil chemoattractant 1 (CINC-1) was originally purified from media conditioned by IL-1 $\beta$  stimulated rat kidney epithelioid cells (NRK-52E). On the basis of its protein and DNA sequences, CINC-1 is a member of the alpha (CXC) subfamily of chemokines. Three additional rat CXC chemokines (CINC-2 $\alpha$ , CINC-2 $\beta$ , CINC-3/MIP-2), sharing approximately 63-67% amino acid sequence identity with CINC-1, have been identified. The protein sequence of rat CINC-1 is also 68%, 71%, and 69% identical to that of human GRO- $\alpha$ , GRO- $\beta$ , and GRO- $\gamma$ , respectively. Based on their sequence homology, it has been suggested that CINC-1 is the rat counterpart of human GROs.

Rat CINC-1 cDNA encodes a 96 amino acid residue precursor protein from which the amino-terminal 24 amino acid residues are cleaved to generate the mature CINC-1. Similar to other alpha chemokines, rat CINC-1 is a potent neutrophil attractant and activator and has been shown to play an important role in the infiltration of neutrophils into inflammatory sites in rats.